

# Rheonik Coriolis Mass Flow Meters





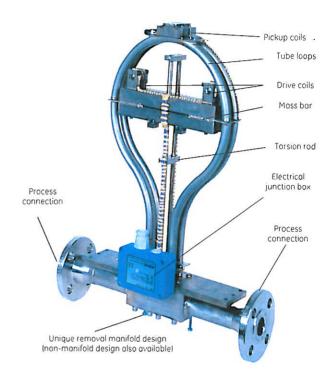
## Unique Features at a Glance

All Rheonik Coriolis mass flow meters are manufactured to strictly controlled procedures and quality standards.

Vacuum brazing is used for the final assembly of Rheonik Omega tube meters. Each meter is closely inspected to ensure all joints are sound and defect free. Smaller meters with removable cases are sealed with an O-ring, creating an IP65/ NEMA 4X joint preventing the ingress of foreign material into the housing.

Process connections can be either a removable manifold style or welded directly to the Omega form tubing to create a truly sealless meter, ideal for processes with hazardous materials.

The pick-up coils and drive coils installed in the meter are constructed of polyamide insulated wire, encapsulated in epoxy resin. High temperature versions have ceramic insulated wiring. Depending upon the size of the meter, up to four PT-100 temperature sensors are installed in the meter for temperature compensation.



There are three main parts to Rheonik's Omega tube meter, each of which has a distinct function. Together, they ensure that each meter produces accurate and repeatable results:

#### Omega Tube Form

- Design permits increased tube wall thickness
- Active measurement section is entire top half of omega tube and totally decoupled from the process piping
- No deformation of half round measurement section with changing pressure gives repeatable measurement
- Requirement for secondary pressure containment eliminated!



Omega Form

#### Torsion Rod

- · Helps energize torsion oscillation
- · Guides tube movement
- Minimizes stress
- Produces large oscillation amplitudes and extremely good signal-to-noise ratio for best accuracies at low flow conditions

### High Mass Cross Bar

- Reduces susceptibility to external vibration and process borne dampening conditions
- · Stabilizes torsion movement
- Works in conjunction with torsion rods to generate harmonic oscillation tuning fork perpetual motion



Torsion Rod



High Mass Cross Bar